

Applicants have amended claims 1-3 to delete any reference to NR<sup>22</sup>R<sup>23</sup>. Accordingly, this rejection should be withdrawn.

The Office Action rejected claims 1-26 under 35 U.S.C. §112, second paragraph, as being indefinite, on various grounds. Applicants have amended claims 1, 2, 3, 6, 8 and 23 to address each point raised in the Office Action. Accordingly, this rejection should be withdrawn.

Favorable consideration and allowance of claims 1-26, as presently amended, is respectfully requested.

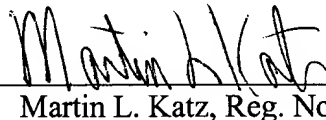
If any additional fees are incurred as a result of the filing of this paper, authorization is given to charge Deposit Account Number 23-0785.

Respectfully submitted,

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Date: June 12, 2003

By:

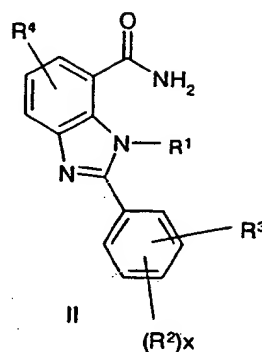
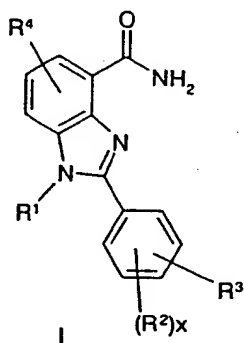
  
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**Marked-Up Version of Claims**

Please amend claim 1 as follows:

1. (amended) A compound of the formula I or II



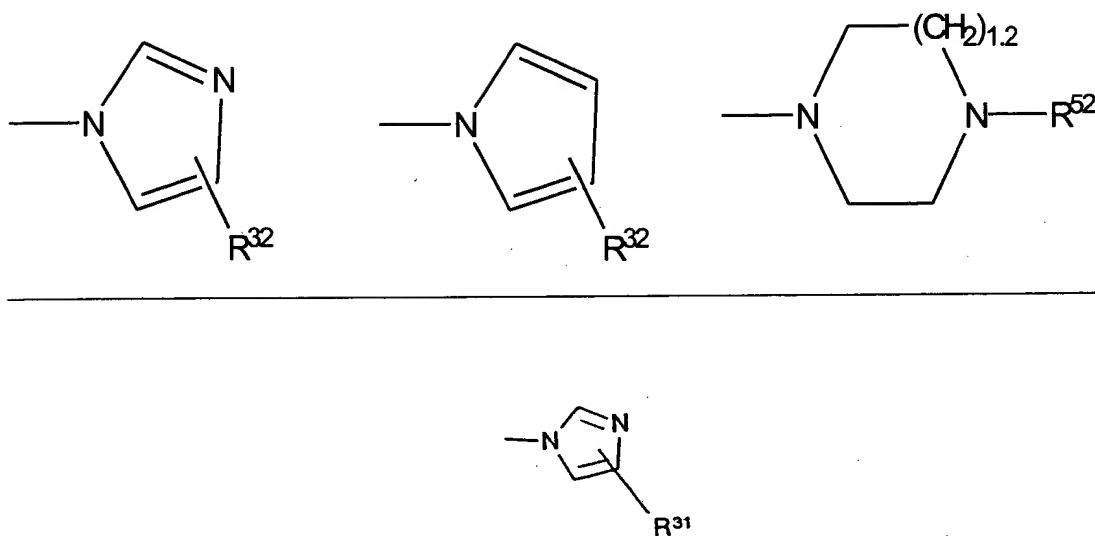
in which

R<sup>1</sup> is hydrogen, or branched and unbranched C<sub>1</sub>-C<sub>6</sub>-alkyl, it also being possible for one C atom of the alkyl radical to carry OR<sup>11</sup> or a group R<sup>5</sup>, where R<sup>11</sup> is hydrogen or C<sub>1</sub>-C<sub>4</sub>-alkyl, and

R<sup>2</sup> is hydrogen, chlorine, bromine, iodine, fluorine, CF<sub>3</sub>, nitro, NHCOR<sup>21</sup>, [NR<sup>22</sup>R<sup>23</sup>,] OH, O-C<sub>1</sub>-C<sub>4</sub>-alkyl, O-C<sub>1</sub>-C<sub>4</sub>-alkylphenyl, NH<sub>2</sub>, CN, a straight or branched C<sub>1</sub>, - C<sub>6</sub>-alkyl, OR<sup>21</sup> or phenyl, it also being possible for the phenyl rings to be substituted by at most two radicals R<sup>24</sup>, and R<sup>21</sup> [and R<sup>22</sup> independently of one another are] is hydrogen or C<sub>1</sub>-C<sub>4</sub>-alkyl [and R<sup>23</sup> is hydrogen, C<sub>1</sub>-C<sub>4</sub>-alkyl or phenyl], and R<sup>24</sup> is OH, C<sub>1</sub>-C<sub>6</sub>-alkyl, O-C<sub>1</sub>-C<sub>4</sub>-alkyl, chlorine, bromine, iodine, fluorine, CF<sub>3</sub>, nitro or NH<sub>2</sub>, and

x may be 0, 1 or 2 and

R<sup>3</sup> is -O-(CH<sub>2</sub>)<sub>o</sub>-(CHR<sup>31</sup>)<sub>m</sub>-(CH<sub>2</sub>)<sub>n</sub>-G, where R<sup>31</sup> is hydrogen, OH, C<sub>1</sub>-C<sub>4</sub> alkyl, or O-C<sub>1</sub>-C<sub>4</sub>-alkyl, m and o are, independently of one another, 0, 1 or 2 and n is 1, 2, 3 or 4,



- D-(F<sup>1</sup>)<sub>p</sub>-(E)<sub>q</sub>-(F<sup>2</sup>)<sub>r</sub> -G, where p, q and r may not simultaneously be 0, or is -E-(D)<sub>v</sub>-(F<sup>2</sup>)<sub>8</sub>-(G)<sub>v</sub>, it also being possible for the radical E to be substituted by one or two radicals A, and if v = 0, E is imidazole, pyrrole, pyridine, pyrimidine, piperazine, pyrazine, pyrrolidine or piperidine, or R<sup>3</sup> is B and
- R<sup>4</sup> is hydrogen, chlorine, fluorine, bromine, iodine, branched and unbranched C<sub>1</sub>-C<sub>6</sub>-alkyl, OH, nitro, CF<sub>3</sub>, CN, NR<sup>41</sup>R<sup>42</sup>, NH-CO-R<sup>43</sup>, or O-C<sub>1</sub>-C<sub>4</sub>-alkyl, where R<sup>41</sup> and R<sup>42</sup> independently of one another are hydrogen or C<sub>1</sub>-C<sub>4</sub>-alkyl
- and R<sup>43</sup> is hydrogen, C<sub>1</sub>-C<sub>4</sub>-alkyl, C<sub>1</sub>-C<sub>4</sub>-alkylphenyl or phenyl, and
- D is S or 0
- E is phenyl, imidazole, pyrrole, thiophene, pyridine, pyrimidine, piperazine, pyrazine, furan,

thiazole, isoxazole, pyrrolidine, piperidine, or trihydroazepine

and

F<sup>1</sup> is a chain of 1 to 8 carbon atoms, it, also being possible for one carbon atom of the chain to carry an OH or O-C<sub>1</sub>-C<sub>4</sub>-alkyl group and

F<sup>2</sup> is a chain of 1. to 8 carbon atoms, it also being possible for one carbon atom of the chain to carry an OH or O-C<sub>1</sub>-C<sub>4</sub>-alkyl group and

p may be 0 or 1

q may be 0 or 1, and

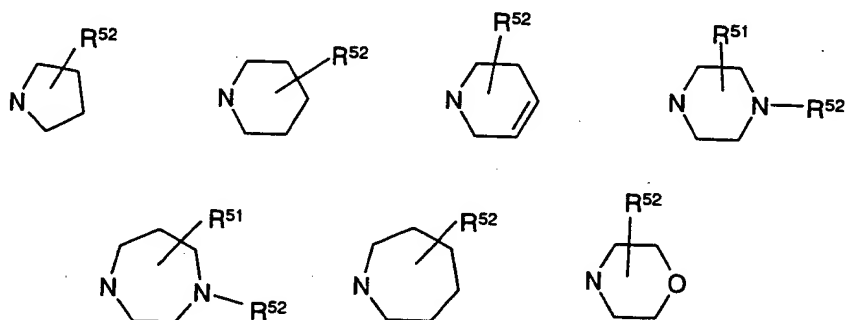
r may be 0 or 1 and

s may be 0 or 1

u may be 0 or 1

v may be 0 or 1

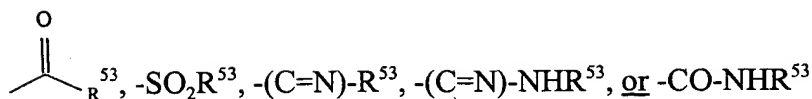
G may be NR<sup>51</sup>R<sup>52</sup> or



[and] where

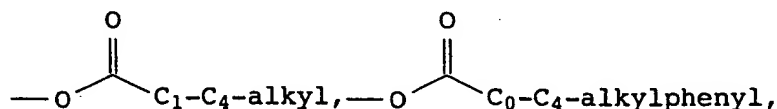
R<sup>51</sup> is hydrogen or branched. and unbranched C<sub>1</sub>-C<sub>6</sub>-alkyl, or (CH<sub>2</sub>)<sub>t</sub>-K and

R<sup>52</sup> is hydrogen, branched and unbranched C<sub>1</sub>-C<sub>6</sub>-alkyl, phenyl, COCH<sub>3</sub>, COCF<sub>3</sub>



in which

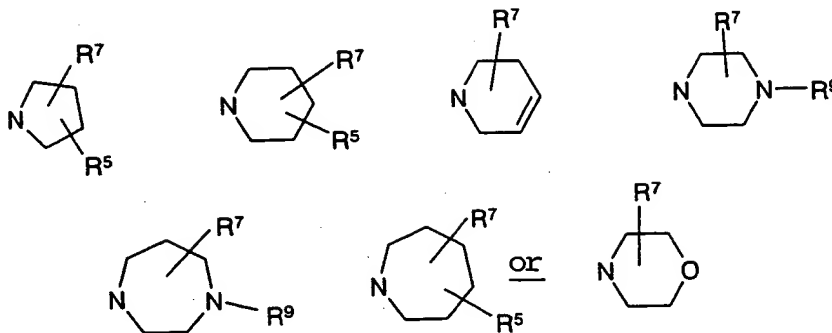
$\text{R}^{53}$  may be branched or unbranched  $\text{O}-\text{C}_1-\text{C}_6$ -alkyl, phenyl, or branched or unbranched  $\text{C}_1-\text{C}_4$ -alkylphenyl, where in the case of  $\text{R}^{52}$  and  $\text{R}^{53}$ , independently of one another, one hydrogen of the  $\text{C}_1-\text{C}_6$ -alkyl radical may be substituted by one of the following radicals: OH,  $\text{O}-\text{C}_1-\text{C}_4$ -alkyl, cyclohexyl, cyclopentyl, tetrahydronaphthyl, cyclopropyl, cyclobutyl, cycloheptyl, naphthyl and phenyl, it also being possible for the carbocycles of the radicals  $\text{R}^{52}$  and  $\text{R}^{53}$  independently of one another to carry one or two of the following radicals: branched or unbranched  $\text{C}_1-\text{C}_6$ -alkyl, branched or unbranched  $\text{O}-\text{C}_1-\text{C}_4$ -alkyl, OH, F, Cl, Br, I,  $\text{CF}_3$ ,  $\text{NO}_2$ ,  $\text{NH}_2$ , CN, COOH,  $\text{COOC}_1-\text{C}_4$ -alkyl,  $\text{C}_1-\text{C}_4$  alkylamino,  $\text{CCl}_3$ ,  $\text{C}_1-\text{C}_4$ -dialkylamino,  $\text{SO}_2-\text{C}_1-\text{C}_4$ -alkyl,  $\text{SO}_2$ phenyl,  $\text{CONH}_2$ ,  $\text{CONH}-\text{C}_1-\text{C}_4$ -alkyl,  $\text{CONH}$ phenyl,  $\text{CONH}-\text{C}_1-\text{C}_4$ -alkylphenyl,  $\text{NHSO}_2-\text{C}_1-\text{C}_4$ -alkyl,  $\text{NHSO}_2$ phenyl,  $\text{S}-\text{C}_1-\text{C}_4$ -alkyl,



CHO,  $\text{CH}_2-\text{O}-\text{C}_1-\text{C}_4$ -alkyl,  $-\text{CH}_2\text{O}-\text{C}_1-\text{C}_4$ -alkylphenyl,  $-\text{CH}_2\text{OH}$ ,  $-\text{SO}-\text{C}_1-\text{C}_4$ -alkyl,  $-\text{SO}-\text{C}_1-\text{C}_4$ -alkylphenyl,  $-\text{SO}_2\text{NH}_2$ ,  $-\text{SO}_2\text{NH}-\text{C}_1-\text{C}_4$ -alkyl

or two radicals form a bridge  $-O-(CH_2)_{1,2}-O-$ ,

B may be



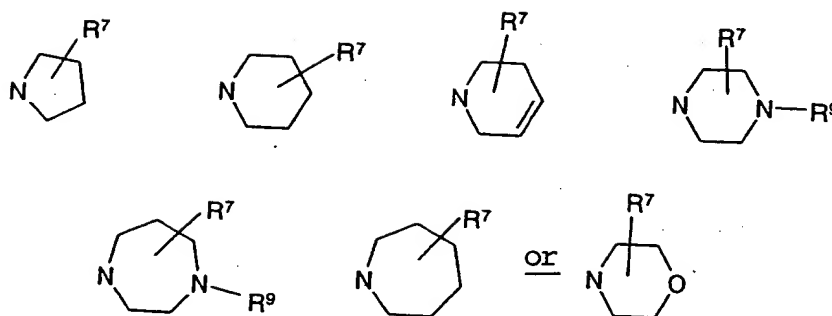
and

A may be hydrogen, chlorine, bromine, iodine, fluorine,  $CF_3$ , nitro, OH,  $O-C_1-C_4$ -alkyl,  $O-C_1-C_4$ -alkylphenyl,  $NH_2$ , branched and unbranched  $C_1-C_6$ -alkyl, CN, or  $NH-CO-R^{33}$ , where  $R^{33}$  is hydrogen,  $C_1-C_4$ -alkyl or phenyl and

t is 0, 1, 2, 3[,] or 4 and

K is [a] phenyl, [which may carry at most two radicals R is]  $NR^{k1}R^{k2}$  where  $R^{k1}$  and  $R^{k2}$  are as defined for  $R^{41}$  and  $R^{42}$  respectively,  $NH-C_1-C_4$ -alkylphenyl, pyrrolidine, piperidine, 1, 2, 5, 6-tetrahydropyridine, morpholine, trihydroazepine, piperazine, which may also be substituted by an alkyl radical  $C_1-C_6$ -alkyl, or homopiperazine, which may also be substituted by an alkyl radical  $C_1-C_6$ -alkyl, and  $C_4$ -alkylphenyl, pyrrolidine, piperidine, 1,2, 5, 6-tetrahydropyridine, morpholine, trihydroazepine, piperazine, which may also be substituted by an alkyl radical  $C_1-C_6$ -alkyl, or homopiperazine, which may also be substituted by an alkyl radical  $C_1-C_6$ -alkyl, and

$R^5$  may be hydrogen,  $C_1-C_6$ -alkyl, or  $NR^7R^9$  and



and

$R^7$  is hydrogen,  $C_1$ - $C_6$ -alkyl,  $C_1$ - $C_4$ -alkylphenyl, or phenyl, it also being possible for the rings to be substituted by up to two radicals  $R^{71}$ , and

$R^{71}$  is OH,  $C_1$ - $C_6$ -alkyl, O- $C_1$ - $C_4$ -alkyl, chlorine, bromine, iodine, fluorine,  $CF_3$ , nitro, or  $NH_2$ , and

$R^8$  is hydrogen,  $C_1$ - $C_6$ -alkyl, phenyl, or Cl- $C_4$ -alkylphenyl, it also being possible for the ring to be substituted by up to two radicals  $R^{81}$ , and

$R^{81}$  is OH,  $C_1$ - $C_6$ -alkyl, O- $C_1$ - $C_4$ -alkyl, chlorine, bromine, iodine, fluorine,  $CF_3$ , nitro, or  $NH_2$  and

$R^9$  is hydrogen,  $COCH_3$ ,  $CO-O-C_1-C_4$ -alkyl,  $COCF_3$ , branched and unbranched  $C_1$ - $C_6$ -alkyl, it being possible for one or two hydrogens of the  $C_1$ - $C_6$ -alkyl radical to be substituted in each case by one of the following radicals: OH, O- $C_1$ - $C_4$ -alkyl and phenyl, and for the phenyl ring also to carry one or two of the following radicals: iodine, chlorine, bromine, fluorine, branched and unbranched  $C_1$ - $C_6$ -alkyl, nitro, amino,  $C_1$ - $C_4$ -alkylamino,  $C_1$ - $C_4$ -dialkylamino, OH, O- $C_1$ - $C_4$ -alkyl, CN,  $CF_3$ , or  $SO_2-C_1-C_4$ -alkyl,

or a tautomeric form, a possible enantiomeric or diastereomeric form, a prodrug or

pharmacologically tolerated salt thereof.

Please amend claim 2 as follows:

2. (amended) A compound of the formula I or II as claimed in claim 1 in which

$R^1$  is hydrogen, branched and unbranched C<sub>1</sub>-C<sub>6</sub>-alkyl, it also being possible for one C atom of the alkyl radical to carry  $OR^{11}$  or a group  $R^5$ , where

$R^{11}$  is hydrogen or C<sub>1</sub>-C<sub>4</sub>-alkyl, and

$R^2$  is hydrogen, chlorine, fluorine, bromine, iodine, branched and unbranched C<sub>1</sub>-C<sub>6</sub>-alkyl, nitro, CF<sub>3</sub>, CN, [ $NR^{22}R^{23}$ ,] NH-CO- $R^{21}$ ,  $OR^{21}$ , where

$R^{21}$  [and  $R^{22}$  are, independently of one another,] is hydrogen or C<sub>1</sub>-C<sub>4</sub>-alkyl, and

[ $R^{23}$  is hydrogen, C<sub>1</sub>-C<sub>4</sub>-alkyl or phenyl, and]

$R^3$  is -O-(CH<sub>2</sub>)<sub>o</sub>-(CHR<sup>31</sup>)<sub>m</sub>-(CH<sub>2</sub>)<sub>n</sub>-G, where

$R^{31}$  is hydrogen, OH [and] or O-C<sub>1</sub>-C<sub>4</sub>-alkyl,

m, o are, independently of one another, 0, 1 or 2, and

n is 1, 2, 3 or 4 and

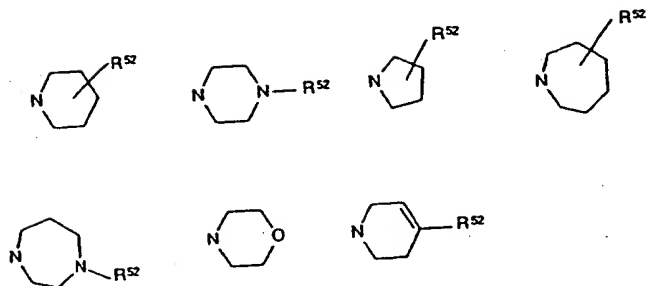
$R^4$  is hydrogen, branched and unbranched C<sub>1</sub>-C<sub>6</sub>-alkyl, chlorine, bromine, fluorine, nitro, cyano,  $NR^{41}R^{42}$ , NH-CO- $R^{43}$ ,  $OR^{41}$  where

$R^{41}$  and  $R^{42}$  are, independently of one another, hydrogen or C<sub>1</sub>-C<sub>4</sub>-alkyl, and

$R^{43}$  is C<sub>1</sub>-C<sub>4</sub>-alkyl or phenyl, and

G is  $NR^{51}R^{52}$  or one of the following radicals

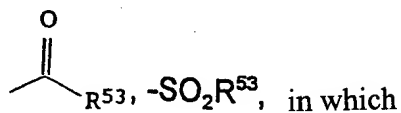




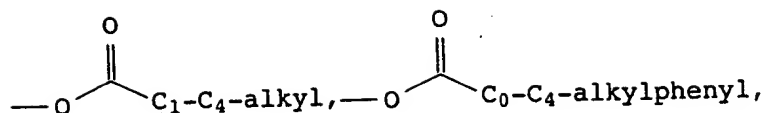
where

$R^{51}$  is hydrogen [and] or branched and unbranched  $C_1$ - $C_6$  alkyl, and

$R^{52}$  is hydrogen, branched and unbranched  $C_1$ - $C_6$ -alkyl phenyl,



$R^{53}$  is branched or unbranched  $O$ - $C_1$ - $C_6$ -alkyl, phenyl, branched or unbranched  $C_1$ - $C_4$ -alkyl-phenyl, where one hydrogen in the  $C_1$ - $C_6$ -alkyl radical in  $R^{52}$  and  $R^{53}$  are, independently of one another, optionally substituted by one of the following radicals:  $OH$ ,  $O$ - $C_1$ - $C_4$ -alkyl, cyclohexyl, cyclopentyl, tetrahydronaphthyl, cyclopropyl, cyclobutyl, cycloheptyl, naphthyl and phenyl, where the carbocycles of the  $R^{52}$  and  $R^{53}$  radicals may also, independently of one another, carry one or two of the following radicals: branched or unbranched  $C_1$ - $C_6$ -alkyl, branched or unbranched  $O$ - $C_1$ - $C_4$ -alkyl,  $OH$ ,  $F$ ,  $Cl$ ,  $Br$ ,  $I$ ,  $CF_3$ ,  $NO_2$ ,  $NH_2$ ,  $CN$ ,  $COOH$ ,  $COOC_1-C_4$ -alkyl,  $C_1$ - $C_4$ -alkylamino,  $CCl_3$ ,  $C_1$ - $C_4$ -dialkylamino,  $SO_2$ - $C_1$ - $C_4$ -alkyl,  $SO_2$  phenyl,  $CONH_2$ ,  $CONH$ - $C_1$ - $C_4$  alkyl,  $CONH$ phenyl,  $CONH$ - $C_1$ - $C_4$ -alkyl-phenyl,  $NHSO_2$ - $C_1$ - $C_4$ -alkyl,  $NHSO_2$ phenyl,  $S$ - $C_1$ - $C_4$ -alkyl,



CHO, CH<sub>2</sub>-O-C<sub>1</sub>-C<sub>4</sub>-alkyl, -CH<sub>2</sub>O-C<sub>1</sub>-C<sub>4</sub>-alkyl-phenyl, -CH<sub>2</sub>OH, -SO-C<sub>1</sub>-C<sub>4</sub>-alkyl, -SO-C<sub>1</sub>-C<sub>4</sub>-alkyl-phenyl, SO<sub>2</sub>NH<sub>2</sub>, -SO<sub>2</sub>NH-C<sub>1</sub>-C<sub>4</sub>-alkyl [and] or two radicals form a bridge -O-(CH<sub>2</sub>)<sub>1,2</sub>-O-,

or a tautomeric form, a possible enantiomeric or. diastereomeric form, a prodrug or pharmacologically tolerated salt thereof.

Please amend claim 3 as follows:

3. (amended) A compound of the formula I or II as claimed in claim 1 in which

R<sup>1</sup> is hydrogen, branched and unbranched C<sub>1</sub>-C<sub>6</sub>-alkyl, it also being possible for one C atom of the alkyl radical to carry OR<sup>11</sup> or a group R<sup>5</sup>, where

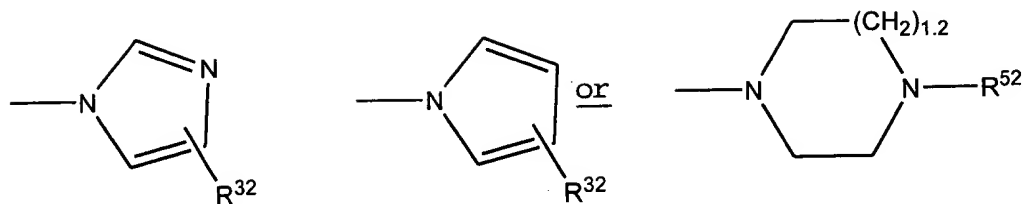
R<sup>11</sup> is hydrogen or C<sub>1</sub>-C<sub>4</sub>-alkyl, and

R<sup>2</sup> is hydrogen, chlorine, fluorine, bromine, iodine, branched and unbranched C<sub>1</sub>-C<sub>6</sub>-alkyl, nitro, CF<sub>3</sub>, CN, NR<sup>22</sup>R<sup>23</sup>, NH-CO-R<sup>21</sup>, OR<sup>21</sup>, where

R<sup>21</sup> and R<sup>22</sup> independently of one another are hydrogen or C<sub>1</sub>-C<sub>4</sub>-alkyl and

R<sup>23</sup> is hydrogen, C<sub>1</sub>-C<sub>4</sub> alkyl or phenyl

$R^3$  is



and

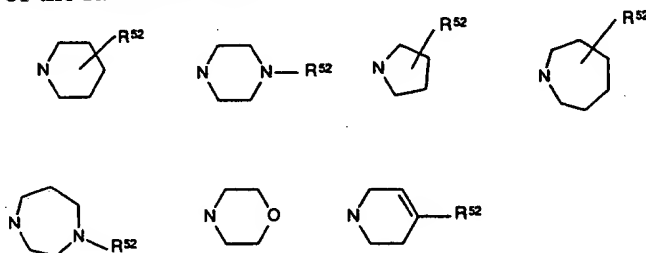
$R^{32}$  is hydrogen and  $-(CH_2)_o-(CHR^{31})_m-(CH_2)_n-G$  where  $R^{31}$  is hydrogen,  $C_1$ - $C_4$ -alkyl, OH and  $O$ - $C_1$ - $C_4$ -alkyl,  $m, o$  independently of one another are 0, 1 or 2 and  $n$  is 1, 2, 3 or 4, and

$R^4$  is hydrogen, branched and unbranched  $C_1$ - $C_6$ -alkyl, chlorine, bromine, fluorine, nitro, cyano,  $NR^{41}R^{42}$ ,  $NH-CO-R^{43}$ ,  $OR^{41}$ , where

$R^{41}$  and  $R^{42}$  independently of one another are hydrogen or  $C_1$ - $C_4$ -alkyl and

$R^{43}$  is  $C_1$ - $C_4$ -alkyl or phenyl, and,

$G$  is  $NR^{51}R^{52}$  or one of the radicals below



where

$R^{51}$  is hydrogen and branched and unbranched and  $C_1$ - $C_6$ -alkyl and

$R^{52}$  is hydrogen,  $COCH_3$ ,  $CO-O-C_1$ - $C_4$ -alkyl,  $COCF_3$ , branched and unbranched  $C_1$ - $C_6$ -alkyl, it

being possible for one hydrogen of the C<sub>1</sub>-C<sub>6</sub>-alkyl radical to be substituted by one of the following radicals: OH, O-C<sub>1</sub>-C<sub>4</sub>-alkyl and phenyl and for the phenyl ring also to carry one or two of the following radicals: chlorine, bromine, fluorine, branched and unbranched C<sub>1</sub>-C<sub>4</sub>-alkyl, nitro, amino, C<sub>1</sub>-C<sub>4</sub>-alkylamino, C<sub>1</sub>-C<sub>4</sub>-dialkylamino, OH, O-C<sub>1</sub>-C<sub>4</sub>-alkyl, CN, SO<sub>2</sub>-C<sub>1</sub>-C<sub>4</sub>-alkyl, or a tautomeric form, a possible enantiomeric or diastereomeric form, a prodrug or pharmacologically tolerated salt thereof.

Please amend claim 6 as follows:

6. (amended) A compound as claimed in claim 1, where

R<sup>2</sup> is hydrogen, branched or unbranched C<sub>1</sub>-C<sub>6</sub>-alkyl, nitro, CN, NH<sub>2</sub>, or O-C<sub>1</sub>-C<sub>4</sub>-alkyl.

Please amend claim 8 as follows:

8. (amended) A compound as claimed in claim 1, where R<sup>3</sup> is -D(F<sup>1</sup>)<sub>p</sub>-(E)<sub>q</sub>-(F<sup>2</sup>)<sub>r</sub>-G where D is [0] Q, F<sup>1</sup> is a C<sub>1</sub>-C<sub>4</sub> carbon chain, p is 1, q is 0 and r is 0.

Please amend claim 23 as follows:

23. (amended) The method as claimed in claim 11 wherein the disorder is a tumor or metasis [I] thereof.